

### **REMARKS**

Claims 1, 5, 9-12, 14-18 and 26-29 are currently pending in the application; with claims 1 and 5 being independent. Claims 1 and 5 have been amended, claims 13 and 19-25 have been cancelled, and new claims 26-29 have been added. Claims 1, 5 and 9-25 were pending prior to the Office Action.

The Examiner is respectfully requested to reconsider the rejections in view of the amendments and remarks set forth herein. Applicants respectfully request favorable consideration thereof in light of the amendments and comments contained herein, and earnestly seek timely allowance of the pending claims.

### ***Allowable Subject Matter***

Applicants thank the Examiner for indicating that claims 13, 20, 22 and 25 contain allowable subject matter.

### ***Claim Rejections - 35 USC §103***

#### **Yoshimine and Yoshiuchi Rejection**

The Examiner rejected claims 1, 5, 18 and 19 under 35 U.S.C. § 103(a) as allegedly being unpatentable over International Patent Publication No. WO 02/47246 to Yoshimine et al. ("Yoshimine") in view of U.S. Patent No. 6,748,807 to Yoshiuchi et al. ("Yoshiuchi"). Applicants respectfully traverse this rejection.

Applicants note that claim 19 has been cancelled.

Applicants have amended independent claims 1 and 5. Applicants have amended claim 1 to incorporate limitations of claim 13. Specifically, claim 1 recites "wherein each of the sensors has a flowcell body provided with its own resonator connected to its own oscillator circuit and its own single power supply, said resonator being on a single substrate, comprising: providing each sensor with its own, individual conducting shield which substantially surrounds said flowcell body; and making an inner wall of a flow tube and each cavity out of a non-conducting material;

wherein said conducting shields of different sensors are not interconnected, and each flow tube interconnecting adjacent sensors is not shielded.

Neither Yoshimine nor Yoshiuchi discloses a method for preventing signal coupling between two or more flow-through type chip-based mounted piezoelectric resonator sensors, wherein conducting shields of different sensors are not interconnected, and each flow tube interconnecting adjacent sensors is not shielded, as also stated by the Examiner on page 9 of the Office Action.

Applicants have amended claim 5 to incorporate limitations similar to those of claim 13. Specifically, Applicants have amended claim 5 to recite a piezoelectric resonator sensor comprising: a flowcell body [...]; and a single power supply [...], wherein said body is substantially surrounded by a conducting shield connected to one pole of the power supply,[...] wherein conducting shields of different sensors are not interconnected, and flow tubes interconnect adjacent sensors, and each flow tube interconnecting adjacent sensors is not shielded.

Neither Yoshimine nor Yoshiuchi discloses a piezoelectric resonator sensor comprising: a flowcell body [...]; and a single power supply [...], wherein said body is substantially surrounded by a conducting shield connected to one pole of the power supply,[...] wherein conducting shields of different sensors are not interconnected, and flow tubes interconnect adjacent sensors, and each flow tube interconnecting adjacent sensors is not shielded, as also stated by the Examiner on page 9 of the Office Action.

For all of the above reasons, taken alone or in combination, Applicants respectfully request reconsideration and withdrawal of the 35 U.S.C. 103 (a) rejection of claims 1 and 5. Claim 18 depends from claim 5 and is allowable at least by virtue of its dependency.

**Yoshimine, Yoshiuchi and Drum Rejection; Yoshimine, Yoshiuchi and Ingram Rejection; Yoshimine, Yoshiuchi and Bellavance Rejection**

The Examiner rejected claims 9 and 14 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yoshimine in view of Yoshiuchi and US 6384337 ("Drum"). The Examiner rejected claims 10, 12, 15, 17, 21, 23 and 24 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yoshimine in view of Yoshiuchi and US 6815872 ("Ingram"). The

Examiner rejected claims 11 and 16 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yoshimine in view of Yoshiuchi and US 5421080 ("Bellavance").

Applicants traverse this rejection. Applicants respectfully submit the Examiner has failed to establish a *prima facie* case of obviousness.

Applicants point out that claims 21, 23 and 24 have been cancelled.

Applicants submit that the Examiner's reliance on Drum (on page 5 of the Office Action), on Ingram (on page 6 of the Office Action), on Bellavance (on page 8 of the Office Action) as allegedly pertaining to incremental features of claims 9, 10, 11, 12, 14, 15, 16, 17 fails to make up for the deficiencies of the asserted Yoshimine and Yoshiuchi references discussed above with respect to independent claims 1 and 5. Therefore, the asserted grounds of rejection fail to establish *prima facie* obviousness of claims 9, 10, 11, 12, 14, 15, 16, 17.

The teachings of Yoshimine and Yoshiuchi are presented above in the arguments traversing the §103 rejection of claims 1 and 5. As provided above in the arguments for the allowability of claims 1 and 5, Yoshimine and Yoshiuchi fail to teach or suggest all of the elements for amended claims 1 and 5.

Drum, Ingram and Bellavance do not disclose or suggest a method for preventing signal coupling between two or more flow-through type chip-based mounted piezoelectric resonator sensors, wherein conducting shields of different sensors are not interconnected, and each flow tube interconnecting adjacent sensors is not shielded. Drum, Ingram and Bellavance also do not disclose or suggest a piezoelectric resonator sensor comprising: a flowcell body [...]; and a single power supply [...], wherein said body is substantially surrounded by a conducting shield connected to one pole of the power supply,[...] wherein conducting shields of different sensors are not interconnected, and flow tubes interconnect adjacent sensors, and each flow tube interconnecting adjacent sensors is not shielded. Therefore, Drum, Ingram and Bellavance do not teach or suggest all the limitations of amended claims 1 and 5.

For all of the above reasons, taken alone or in combination, Applicants respectfully request reconsideration and withdrawal of the 35 U.S.C. 103 (a) rejection of claims 9, 10, 11, 12, 14, 15, 16, 17.

***New Claims***

In this Reply, claims 26-29 have been added. Claims 26-29 depend from claim 1 and are allowable at least by virtue of their dependency.

**Conclusion**

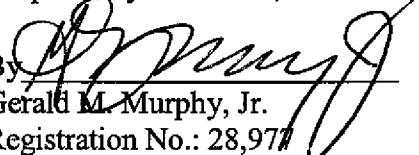
In view of the above amendments and remarks, this application appears to be in condition for allowance and the Examiner is, therefore, requested to reexamine the application and pass the claims to issue.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Corina E. Tanasa, Limited Recognition No. L0292 under 37 CFR §11.9(b), at telephone number (703) 208-4003, located in the Washington, DC area, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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